

ABSTRACT OF THE DISCLOSURE

A short pulse laser arrangement (~~11~~) with, preferably, passive mode-locking, comprising a resonator (~~12~~) containing a laser crystal (~~14~~) and several mirrors (~~M1-M7, OC~~), one of which forms a pump beam coupling-in mirror (~~M1~~) and one of which forms a laser beam out-coupling mirror (~~OC~~), and a multiple reflexion telescope (~~18~~) enlarging the resonator length, the resonator (~~12~~) in operation having a positive averaged dispersion over a wavelength range concerned; the ad-justment of the positive averaged dispersion of the resonator (~~12~~) is effected by means of the mirrors (~~M1-M7, OC~~) of the resonator (~~12~~), at least a few of which are designed as dispersive mirrors.